

I. COOLING WATER INTAKE STRUCTURE(S)

- A. Nothing in this permit authorizes a take of endangered or threatened species under the Endangered Species Act.
- B. Technology and operational measures employed at the cooling water intake structures must be operated in a way that minimizes impingement mortality (IM) and entrainment to the fullest extent possible.
- C. The location, design, construction or capacity of the intake structure(s) may not be altered without prior approval of DEP.
- D. The permittee shall retain data and other records for any information developed pursuant to Section 316(b) of the Clean Water Act for a minimum of ten years.
- E. To meet Best Technology Available (BTA) requirements to minimize adverse impacts from impingement and entrainment the permittee will maintain an average 24-month capacity utilization rate (CUR) of less than 8% and operate in accordance with the Standard Operating Procedure (SOP) submitted with the application under Section V.B of the §316(b) Report that will result in an estimated reduction in IM of approximately 79%.
- F. Any modifications to the SOP must be submitted to DEP. The SOP must entail the following measures:
 - 1. One river water pump (RWP) per unit will remain in service throughout the year to provide water needed for essential station operations.
 - 2. During the 12-hour start-up process prior to generating electricity, both cooling water pumps (CWPs) and the second RWP per unit will be placed in service.
 - 3. During electricity generation, both CWPS and both RWPs per unit will remain in service.
 - 4. At the beginning of the shut-down process, one CWP and one RWP per unit will be removed from service. The remaining CWP per unit will remain in service until the turbines' temperatures have cooled to 150°F (approximately 10 days), at which point Exelon will take that CWP out of service.
- G. An annual report shall be submitted to the PA DEP Southeast Regional Office showing monthly CUR per unit and Actual Intake Flow (AIF).
- H. All impingement or entrainment sampling data collected in accordance with the Individual Incidental Take Permit (IITP) shall be submitted via annual reports to the PA DEP Southeast Regional Office within 90 days following each calendar year of IITP sampling.
- I. Impingement Sampling:
 - 1. Within one year of the permit effective date, the permittee shall submit an impingement sampling plan to the Department. In lieu of a separate study, impingement sampling conducted in accordance with the IITP may be used with prior approval of a study plan by the Department. The impingement sampling study plan shall include details regarding the permittee's collection of 2 years of impingement data for each species, including shellfish, over a 24-hour period following the impingement sampling schedule required by Eddystone Generating Station's IITP No. 23148, which is as follows:
 - a. One day per week during each week in which Eddystone circulating water pumps run for Essential Station Operations for one or more days (with a day equal to 24 hours of pump operation), and
 - b. No sampling during each week in which Eddystone circulating water pumps do not run on any day (with a day equal to 24 hours of pump operation) for Essential Station Operations.
 - 2. The impingement sampling shall be completed during the period identified above after Department approval of the impingement sampling plan.

3. An interim annual data report covering all species impinged shall be submitted to the Department within 90 days following completion of the first full calendar year of impingement data collection. A final two-year data report covering all species impinged shall be submitted to the Department within 90 days following completion of the second full calendar year of impingement data collection. The final data report shall include an analysis comparing the results from the current study to the results from the 2005-2006 Eddystone impingement sampling.
- J. If the average 24-month CUR from all hours of generation, including those associated with the facility's response to PJM's need for power, for either Unit 3 or Unit 4 were to exceed 8% during the permit period, then Exelon shall notify PA DEP and propose an alternative IM compliance option consistent with the requirements at 40 CFR 125.94(c).
 - K. If DEP determines the methods to meet impingement and entrainment BTA requirements are not sufficient, the permittee will employ additional controls to reduce adverse impacts from impingement and entrainment as outlined by DEP.
 - L. The permittee will submit an annual certification statement and report as a part of the annual report submitted in accordance with I.G. The annual certification shall describe any substantial modifications to the operation of any unit at the facility that impacts cooling water withdrawals or operation of the cooling water intake structures. If no significant changes, the certification will show that no such changes have occurred.
 - M. If the permittee wishes to submit a request for a reduction in permit application requirements as outlined in 40 CFR §125.95(c), it must be submitted to DEP at least two years and six months before this permit expires.